

REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-21 are currently pending. By way of the foregoing amendments, Claims 1 and 15 have been amended and new Claims 18-21 have been added.

As requested by the Examiner, the abstract of the disclosure has been amended to remove the title. Accordingly, reconsideration and withdrawal of this objection are respectfully requested.

Applicants note with appreciation the Examiner's indication that certified copies of the priority documents have been received. Moreover, Applicants also note with appreciation the Examiner's consideration of, and making of record, the documents submitted with Applicants' Information Disclosure Statement filed on August 5, 2003.

Claims 4, 5, 15 and 16 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. According to the Official Action, these claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants respectfully submit that these originally filed claims clearly indicate that Applicants possessed the invention set forth therein at the time of filing. As stated in MPEP § 2163.03 "there is a strong presumption that an adequate written description of the claimed invention is present in the specification as filed. Consequently, rejection of an original claim for lack of written description should be rare." The MPEP proceeds to detail a number of specific circumstances wherein lack of written description may arise with respect to original claims. However, none of these situations relates to the presently rejected claims. In addition to the originally filed claims, the subject matter at issue also finds support in other parts of the originally filed specification. For example, the phrase "said plurality of separate

transmission channels are directed to a plurality of different service providers" can be seen in Figure 4. The phrase "said plurality of separate transmission channels comprising a plurality of signals with a plurality of different modulation schemes", finds written descriptive support on page 4, lines 19-21 of the originally filed specification.

Accordingly, reconsideration and withdrawal of the rejection of Claims 4, 5, 15 and 16 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement are respectfully requested.

Claims 11, 13 and 14 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly failing to provide sufficient antecedent basis for the phrase "POTS detector circuit". Applicants have reviewed Claim 11 and note that this phrase is preceded by the indefinite article "a". Accordingly, Applicants are uncertain as to how to amend Claim 11 in a manner which will render this claim more definite. Accordingly, should the Examiner maintain this ground of rejection in a subsequent Official Action, he is respectfully requested to indicate to Applicants how this claim should be amended.

Claims 15-17 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by O'Toole et al. (U.S. Patent No. 5,889,856). By way of the foregoing amendments, independent Claim 15 has been amended to include the subject matter from Claim 1 which is admitted in the Office Action to be lacking in the O'Toole patent. Specifically, Claim 15 has been amended to include the phrase "wherein said plurality of separate bands are determined by programming said filter". Accordingly, reconsideration and withdrawal of the rejection of Claims 15-17 under 35 U.S.C. § 102(e) in view of O'Toole are respectfully requested.

Claims 1-14 stand rejected under 35 U.S.C. § 103 as allegedly being unpatentable over O'Toole et al. in view of Liu et al. (U.S. Patent No. 6,252,900) and Timm et al. (U.S. Patent No. 6,522,730). As correctly recognized in the Official Action, O'Toole fails to teach configuring the filtering of frequency bands of an output

signal into a plurality of separate transmission channels wherein said plurality of separate transmission channels are associated with the communications network and wherein the frequency bands are determined by programming the programmable filter. Accordingly, the Official Action relies upon the Liu patent to allegedly remedy these deficiencies.

Liu describes a forward compatible and expandable high speed communications systems wherein an ADSL compatible modem selects a subset of the available downstream DMT sub-channels based on an evaluation of the sub-channels by appropriate signal processing circuitry. As described in column 3, lines 1-10 of the Liu patent, a DMT implementation of ADSL uses the entire available 1 MHz range of a copper phone line by splitting the signal into 255 separate channels, each of which has a 4 kHz bandwidth. Although Liu et al. does describe a frequency sub-channel of an ADSL system, it fails to teach or suggest, among other features, the provision of variable bandwidth transmission channels wherein the frequency and variable bandwidths of the channels are determined by programming a programmable filter, as set forth, among other features, in Applicants' Claim 1 combination. The Timm patent also fails to teach or suggest this claimed combination of features. Timm discloses a telecommunications system using DSL modems wherein programmable filter circuitry is provided. However, the programmable filter circuitry of Timm et al. is not provided to generate multiple, variable bandwidth, channels.

Applicants respectfully submit that no combination of the O'Toole, Liu and Timm patents would have motivated one of ordinary skill in the art to arrive at Applicants' Claim 1 combination. Similar comments apply to Applicants' Claim 15 combination.

New Claims 18-21 have been provided to provide additional claim coverage for the present invention. It is respectfully submitted that the newly submitted claims are also patentably distinguishable from the documents of record. For example, the documents of record fail to teach or suggest the independent Claim 18 and 20

combinations including, among other things, "a first transmission channel having a first variable frequency bandwidth; and a second transmission channel having a second variable frequency bandwidth, wherein said programmable filter can be programmed to adjust a band edge of either said first transmission channel or said second transmission channel to increase or decrease said first and second variable frequency bandwidths, respectively" and "filtering said broadband analog signal using a programmable filter into a plurality of separate frequency bands including a first transmission channel having a first variable frequency bandwidth and a second transmission channel having a second variable frequency bandwidth; programming said programmable filter to adjust a band edge of either said first transmission channel or said second transmission channel to increase or decrease said first and second variable frequency bandwidths, respectively; and transmitting said first and second transmission channels to different service providers".

All of the objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance and a notice to that effect is earnestly solicited. Should the Examiner have any questions regarding this response, or the application in general, he is urged to contact the undersigned in order to expedite prosecution.

Respectfully submitted,

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